



**UNITED STATES DEPARTMENT OF COMMERCE  
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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/004,034	01/07/98	CRAGUN	B IBM/33B

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LM02/1006

EXAMINER

WEINHARDT, R

ART UNIT

PAPER NUMBER

2764

DATE MAILED: 10/06/99

**Please find below and/or attached an Office communication concerning this application or proceeding.**

**Commissioner of Patents and Trademarks**

# Office Action Summary

Application No.

09/004,034

Applicant(s)

Cragun et al.

Examiner

Robert Weinhardt

Group Art Unit

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☐ Responsive to communication(s) filed on \_\_\_\_\_.

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire THREE month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

## Disposition of Claims

☒ Claim(s) 1-38 is/are pending in the application.

Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

☐ Claim(s) \_\_\_\_\_ is/are allowed.

☒ Claim(s) 1-38 is/are rejected.

☐ Claim(s) \_\_\_\_\_ is/are objected to.

☐ Claims \_\_\_\_\_ are subject to restriction or election requirement.

## Application Papers

☒ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some\* ☐ None of the CERTIFIED copies of the priority documents have been  
☐ received.

☐ received in Application No. (Series Code/Serial Number) \_\_\_\_\_.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\*Certified copies not received: \_\_\_\_\_.

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

## Attachment(s)

☒ Notice of References Cited, PTO-892

☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). 2

☐ Interview Summary, PTO-413

☒ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

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### DETAILED ACTION

1. The drawings are objected to because of the reasons set forth on the PTO-948 form enclosed. Correction is required.
2. Applicant is required to submit a proposed drawing correction in reply to this Office action. However, formal correction of the noted defect can be deferred until the application is allowed by the examiner.

### ***Double Patenting***

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

4. Claims 1-38 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-13 of U.S. Patent No. 5,774,868 to Cragun et al. Although the conflicting claims are not identical, they are

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not patentably distinct from each other because deletion with a corresponding loss of function would have been obvious to those of ordinary skill in the art.

The instant claims generally recite various subsets of the limitations found in the '868 patent. The deletion of features from the patented claims with the corresponding loss of function would have been obvious to those of ordinary skill in the art. See *In re Karlson*, 136 USPQ 184, 186; 311 F.2d 581 (CCPA 1963).

5. Claims 1-38 are rejected under the judicially created doctrine of double patenting over claims 1-13 of U. S. Patent No. 5,774,868 to Cragun et al. since the claims, if allowed, would improperly extend the "right to exclude" already granted in the patent.

The subject matter claimed in the instant application is fully disclosed in the patent and is covered by the patent since the patent and the application are claiming common subject matter, as follows:

The identification of sales promotions. The instant application is a divisional application of SN 08/363,053 and thus contains the same specification.

Furthermore, there is no apparent reason why applicant was prevented from presenting claims corresponding to those of the instant application during prosecution of the application which matured into a patent. See *In re Schneller*, 397 F.2d 350, 158 USPQ 210 (CCPA 1968). See also MPEP § 804.

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***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

7. Claims 1-4, 7-12, 15-18, 20, 22-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Deaton et al.

Deaton et al. teaches an input device that receives customer data relating to purchases of items by customers including a current visit to a purchase location, a computer system including a plurality of item identifiers that identify items available for purchase wherein the system responds to customer data received from the input device by determining if one or more of the item identifiers stored corresponds to an item likely to be purchased by one of the customers and identifies a sales promotion relating to the item and an output device that receives the item identifiers of the likely purchases and suggests, during the current visit, items to be purchased. See the abstract, col. 64 lines 16-61, col. 71 lines 31- 67, col. 90 lines 36-50, col. 100 lines 29-63, col. 101 lines

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14-24 of Deaton. Deaton further teaches that the response of the system is selectively adapted in response to customer data. See col. 71 lines 13-17 of Deaton. Deaton also teaches assigning the items to classes of items purchased together and promoting purchase of a missing item, col. 71 lines 57-67, as well as updating the classes of products, col. 101 line 48 to col. 102 line 15.

While Deaton does not teach that the purchase advisor includes a neural network, Official Notice is taken that neural networks are well known in the art and provide a powerful tool in the analysis and determination of relationships and patterns. In addition, it is well known that neural nets must be trained in order to provide accurate results and that repeated training is also known. Note also applicant's admitted prior art in the specification on page 13 regarding training of neural networks. As a result, it would have been obvious to those of ordinary skill in the art to modify the system of Deaton to make use of well known trained neural nets to analyze the input purchases and select a likely item for promotion in light of the known advantages of such nets mentioned above.

***Allowable Subject Matter***

8. Claims 5-6, 13-14, 19, 21, and 26 objected to as being dependent upon a rejected base claim, but would be allowable upon the filing of an appropriate terminal

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disclaimer if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 27-38 would be allowable upon the filing of an appropriate terminal disclaimer.

The prior art of record considered as a whole fails to teach or suggest a customer demographics neural network that estimates buying characteristics of one or more customers likely to be at a purchase location, and produces item identifiers comprising estimated item purchases of the estimated customers or identifies sales promotions based on the estimated buying characteristics.

The prior art of record considered as a whole also fails to teach or suggest a demographics neural network provided with prediction data comprising the current date, current time of day and environmental information and generating with the demographics neural network predicted customer purchases

### ***Conclusion***

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Cameron teaches cross-selling based on a customer's current order.


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10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert Weinhardt whose telephone number is (703) 305-9780. The examiner can normally be reached on Monday-Friday from 7:30 AM - 4:00 PM. The examiner can also be reached at the e-mail address:  
robert.weinhardt@uspto.gov

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Trammell, can be reached on (703) 305-9768. Facsimile transmissions to this Group may be directed to (703) 308-1396.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-3900.

September 30, 1999

  
ROBERT A. WEINHARDT  
PRIMARY EXAMINER